ABSTRACT

COMMON APERTURE ANTENNA

This invention relates to antennas (26, 28, 30 32, 34) comprising an integrated array of antenna elements (36). More particularly, the invention relates to antennas (26, 28, 30 32, 34) in which the array of antenna elements (36) can be reconfigured to suit a multitude of system functions, such as radar, electromagnetic warfare (EW) and communication. Such antennas (26, 28, 30 32, 34) are often referred to as 'common aperture antennas' and find use on many platforms including airborne vehicles, ships and boats. An antenna (26, 28, 30 32, 34) is provided that comprises a plurality of antenna elements (36), the antenna (26, 28, 30 32, 34) being operable with sets of the antenna elements (36) organised into first order groups (14, 46) and with sets of first order groups (14, 46) organised into sets of second order groups (18).

Fig. 4

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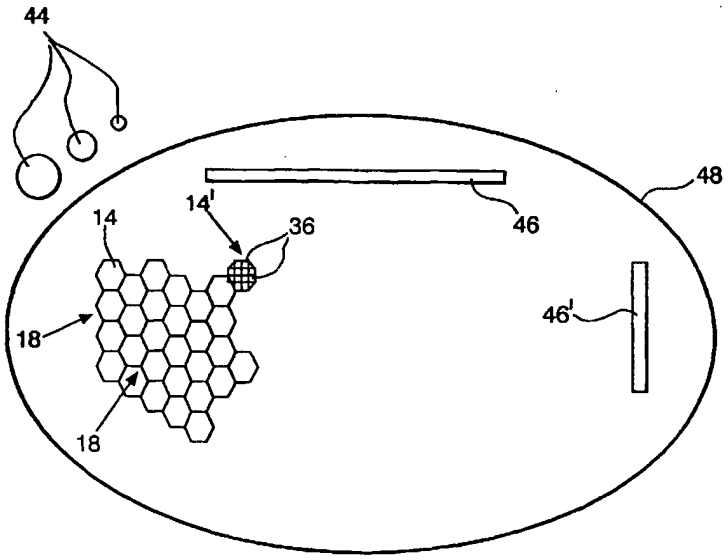

(57) Abstract: This invention relates to antennas (26, 28, 30 32, 34) comprising an integrated array of antenna elements (36). More particularly, the invention relates to antennas (26, 28, 30 32, 34) in which the array of antenna elements (36) can be reconfigured to suit a multitude of system functions, such as radar, electromagnetic warfare (EW) and communication. Such antennas (26, 28, 30 32, 34) are often referred to as 'common aperture antennas' and find use on many platforms including airborne vehicles, ships and boats. An antenna (26, 28, 30 32, 34) is provided that comprises a plurality of antenna elements (36), the antenna (26, 28, 30 32, 34) being operable with sets of the antenna elements (36) organised into first order groups (14, 46) and with sets of first order groups (14, 46) organised into sets of second order groups (18).

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